

Figure S1. The distribution of MBDA score (A), CRP (B), DAS28 (C), DAS28-CRP (D) and ESR (E) among radiographic progressors and non-progressors. The vertical dashed line illustrates threshold value for rapid radiographic progression ($\Delta\text{SHS}>5$) and non-progression ($\Delta\text{SHS}\leq 5$). The horizontal dashed line (A), indicates the threshold for low/moderate MBDA score ($\text{MBDA}\leq 44$). Analyses of MBDA, CRP, DAS28, DAS28-CRP and ESR as continuous variables showed that more proportion of patients with MBDA at lower levels have $\Delta\text{SHS}\leq 5$ (located in the left lower area), compared to proportion of non-progressors within low levels of CRP, DAS28, DAS28-CRP or ESR.

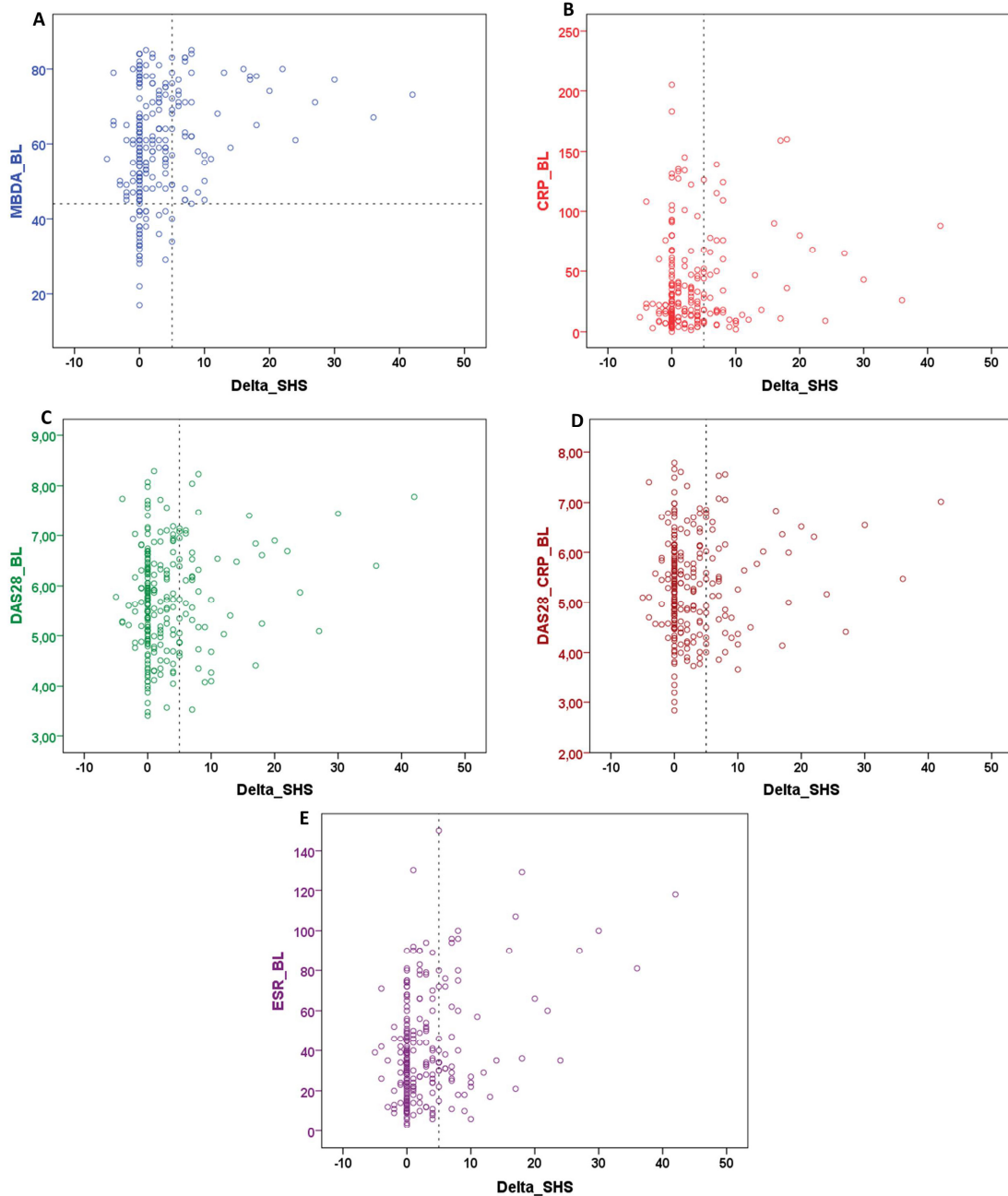


Figure S2. Proportions of non-progressors ($\Delta\text{SHS}\leq 5$) within tertiles of disease activity measures. Categorisation of disease activity measures by tertiles and analyses of proportion of rapid radiographic progressors revealed that patients within low tertile of the MBDA scores have the highest rate of non-progressors (91,1%). Patients within the highest tertiles of the MBDA score have the lowest proportion of non-progressors (68,4%) compared to other disease activity measures. This information points out that the MBDA score has better discriminative capacity in terms of radiographic progression compared to CRP, DAS28 or DAS28-CRP.

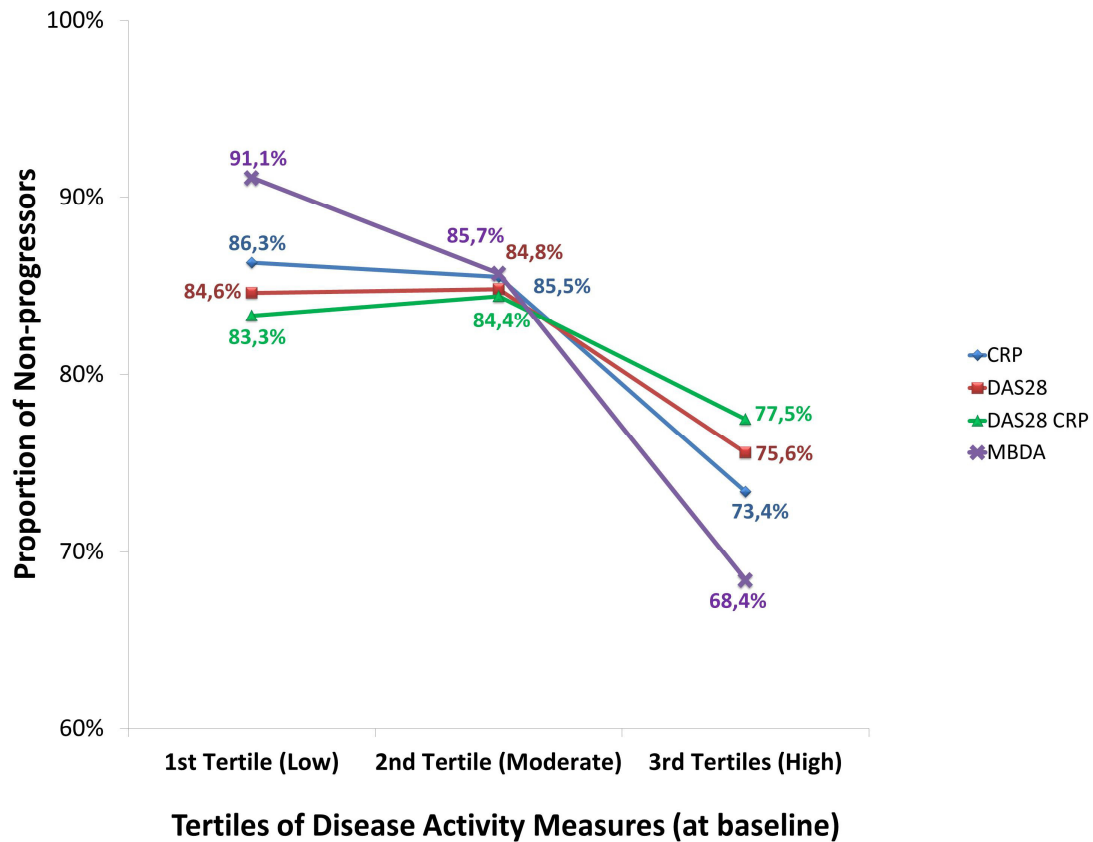


Figure S3. Distribution of the MBDA score among progressors ($\Delta\text{SHS}>5$) and non-progressors ($\Delta\text{SHS}\leq 5$) within high (>44) MBDA subgroup (N=201). There is significant difference of MBDA score between progressors and non-progressors ($p=0.010$), by Mann-Whitney U test. The mean MBDA for progressors and non-progressors was 67.7 and 62.5 respectively.

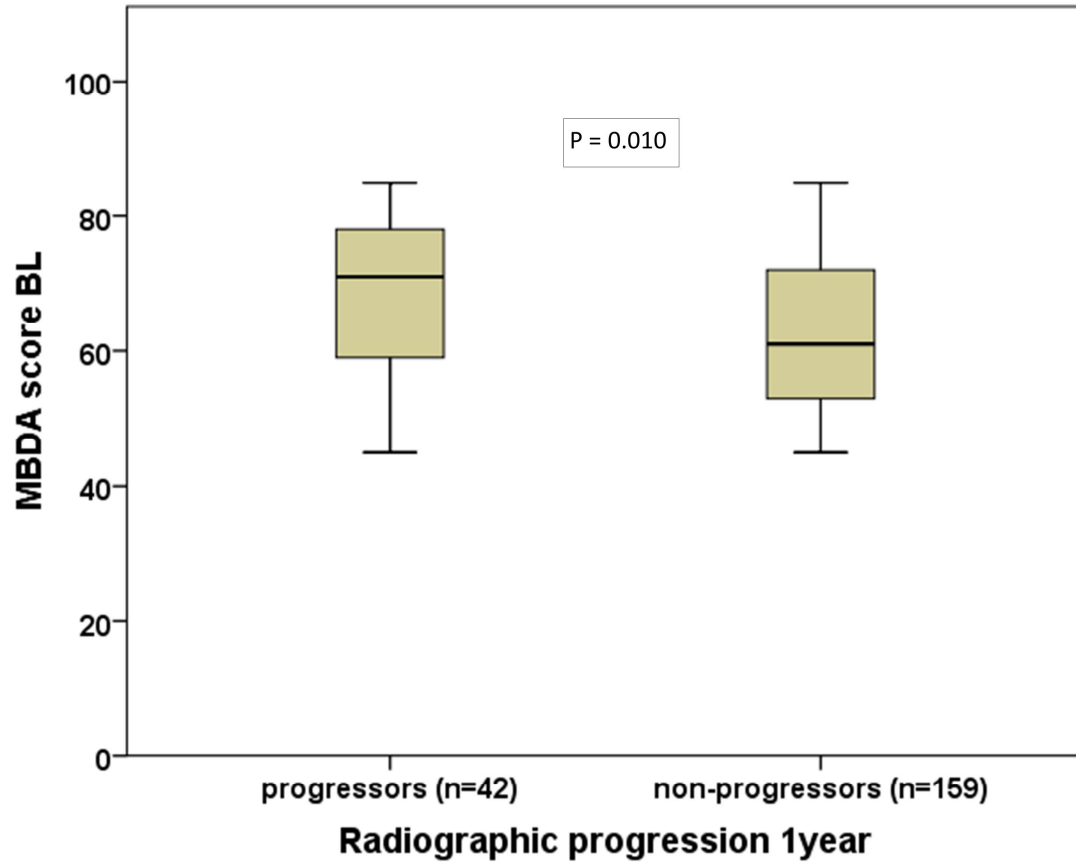


Figure S4. Proportion of radiographic progressors (Δ SHS>5) among patients with high (>44) MBDA score (N=201). White bar (n=120) represents proportion of progressors within patients with MBDA score 45-65 and black bar (n=81) represents proportion of progressors with MBDA score 66-85.

